



#3

SEQUENCE LISTING

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BERGQUIST, PETER L.  
SCHOLIN, CHRISTOPHER A.

<120> COMPOSITIONS AND METHODS FOR DETECTING RAPIDOPHYTES

<130> 50681200121

<140> 09/780,113  
<141> 2001-02-09

<150> 09/596,136  
60/141,362

<151> 2000-06-16  
1999-06-28

<160> 30

<170> PatentIn Ver. 2.1

<210> 1  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Artificial oligonucleotide probe

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<223> W is A or T/U; K is G or T/U.

<400> 1  
GWATTACCGC GGCKGCTG 18

<210> 2  
<211> 18  
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<220>  
<223> Description of Artificial Sequence:Artificial oligonucleotide probe

<220>  
<223> M is A or C; W is A or T/U.

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CAGCMGCCGC GGTAATWC 18

<210> 3  
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<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificial oligonucleotide probe

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CGACTGAGCA CGCACCTTT

19

<210> 4

<211> 21

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Artificial oligonucleotide probe

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GCGACGGCAA AAAGACCAGG A

21

<210> 5

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificial oligonucleotide probe

<400> 5

GCATGTTGAA ACGCTCCAG

19

<210> 6

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Artificial oligonucleotide probe

<400> 6

AGCAAAGGTC CTCCGTCCTA

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<210> 7

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificial oligonucleotide probe

<400> 7

TACTCTCTTT TCAAAAGTCT TTTCATC

27

<210> 8  
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CCATGGGACA CAGCGCGCAC TAC

23

<210> 13

<211> 22

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Artificial oligonucleotide probe

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TACAAACCAA GGTGCACTAA TG

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<210> 14

<211> 27

<212> DNA

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<223> Description of Artificial Sequence:Artificial oligonucleotide probe

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AACTCTCTTT CCAAAGTTCT TTTCATC

27

<210> 15

<211> 23

<212> DNA

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ACCACGACTG AGCACGCACC TTT

23

<210> 16

<211> 20

<212> DNA

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AGCCCGGGAC CACGACTGAG

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<211> 23

<212> DNA

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GAGCAAAGGT CCTCCGTCCT AAC

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<210> 18

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<212> DNA

<213> Artificial Sequence

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TACTCTCTTT TCAAAAGTCT TTTCATC

27

<210> 19

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<223> Description of Artificial Sequence:Artificial oligonucleotide probe

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CCGCTTCACT CGCCGTTACT AG

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<210> 20

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<212> DNA

<213> Artificial Sequence

<220>

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TCATCTTTCC CTCACGGTAC TTGTT

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<211> 21

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<223> Description of Artificial Sequence:Artificial oligonucleotide probe

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21

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<223> Description of Artificial Sequence:Artificial oligonucleotide probe

<400> 22

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<210> 23

<211> 23

<212> DNA

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<223> Description of -Artificial Sequence: Artificial

<400> 23

AGAGTAGCTG AGCACGCATC TCT

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<210> 24

<211> 687

<212> DNA

<213> Chattonella antiqua

<400> 24

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AGAGCTCATG TTGTAAATCT GGATGAGGAT TCCTCGTCCC GAATTGTAGT CTAGAGATGC 120  
GTGCTCAGCT ACTCTCCAGG GCTAAGTCTG TTTGTGAAAG ACAGCATCAT GGACGGTGAT 180  
AATCCGGTTC TTGCCTTGA TGTGTAGCG TCTTGAGCCG TCCTCAACGA GTCGAGTTGC 240  
TTGGGATTGC AGCTCTAAGC GGGTGGTAAA TTCCATCTAA AGCTAAATAT TGGTGGGAGA 300  
CCGATAGCGA ACAAGTACCG TGAGGGAAAG ATGAAAAGAA CTTTGAAAAG AGAGTTAAAT 360  
AGTACCTGAA ACTGCTGAAA GGAAGCGAA TGAAGTCAGT GTTGCTCTTT GTTCTCTGCA 420  
TCCTCCCTGC GGGGATTGTG TATCGAGGAC TTTGAGCTTG TCAGGATGAG TTCTCTGCCG 480  
CGGGATATGG TTTGTGAGCT GGATGCTTCT GCTGAACTCA CTCTCTCTGT CGTGGCTTGG 540  
ACTGAGGTTT CATCTTGCCG TTGCCTGCTT GTTACTCTCC TGTGCTGTT TCTGTCCTAC 600  
TGCTTGCACT GTTCGGTTGC AGTGATTGGA CTGTGCAAGT TATGCATGCA AGGTCAGGAT 660  
CCTGACGAAT GGCTTTATTA ACCCGAA 687

<210> 25

<211> 681

<212> DNA

<213> Chattonella subsalsa

<400> 25

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CTACTCTCCA GGGCTAAGTC TGTTTGTGAA AGACAGTGTC ATGGACGGTG ATAACCCGGT 180  
TCTTGCTTGA GATGTTGTAG CGTTTGTGAG CGTCCTCAAC GAGTCGAGTT GCTTGGGATT 240  
GCAGCTCTAA GTGGGTGGTA AATTCCATCT AAAGCTAAAT ATTGGTGGGA GACCGATAGC 300  
GAACAAGTAC CGTGAGGGAA AGATGAAAAG AACTTTGAAA AGAGAGTTAA ATAGTACCTG 360  
AAACTGCTGA AAGGGAAGCG AATGAAGTCA GTGTTGCTCT TTGTGCTCTG CATCCTCCCT 420  
GCGGGGATTG TGTATCGAGG ACTTTGAGCT TGTCAGGATG AGTTCTCTGC CGCGGGATAT 480  
GTTTGTATG CTGGATGCTT TTTGCGGAAC ATACATTCTC TGTCTGTGGT TGGACTGAGG 540  
TTCCATCTTG CCGTTGCCTG TGCGTTCCTC TCCCGTTGCT GTCTCTGTTC TACTGCTTGC 600

AGTGCTCAGT TGCAGTAGTT GGA CTGTGCG TATTATGCAT GCAAGGTCAG GATCCTGACG 660  
AATGGCTTTA TTCACCCGCA A 681

<210> 26  
<211> 703  
<212> DNA  
<213> *Fibrocapsa japonica*

<400> 26  
CAGAGGAAAA GAAACAACCTC GGATTCCCTA GTAACGGCGA GTGAAGCGGG AACAGCTCAT 60  
GATGTAAATC TGGGTGACGT TTCGTTACCC CGAATTGTAG TCTACAGAAG CGTGTCCAGC 120  
CGCGCCCCCT GGCAAAGTCC CCTGGAACGG GGCATCGTGG ACGGTGACAA TCCGGTTCAT 180  
GCCTGGGGTG TCGCGTGTGT ACGGGCCGTT TTCAACGAGT CGAGTTGCTT GGGATTGCAG 240  
CTCTAAGCGG GTGGTAAATT CCATCTAAAG CTAAATATTG GTGGGAGACC GATAGCGAAC 300  
AAGTACCGTG AGGGAAAGAT GAAAAGAACT TTGGAAAGAG AGTTAAACAG TACCTGAAAT 360  
TGCTGAAAGG GAAGCGAAGG AAGTCAGTGT ATGCCGGGGG TCATATTTCG TGCTGCCTTG 420  
AGGGGTAGTG CGCGCTGTGT CCCATGGGCT GGTCAAGGATG GGTTTGTTCC GCGGGAGATT 480  
CCCAGGGTTG AGGTAGGTCC TTTTGGATTG TCAGCAACCC TGTGGCATGT CGTGGTTCGG 540  
ACCGAGGCAT TAGTGACCT TGGTTTGATG GGTTTTATAT GCGTGATCAT GTCTGTGACA 600  
GCATGCTGTG GCGGTTGTGT TATCGTTTAT TTGCCTTGCA TTCCCCGTGC GCTCTAGATC 660  
CTGTCAAATG GCTTCTTCC ACCTCTTGAA AGACGGACCA AGG 703

<210> 27  
<211> 715  
<212> DNA  
<213> *Heterosigma akashiwo*

<400> 27  
ACCCGCTGAA TTAAAGCATA TAATTAAGGG GAGGAAAAGA AACCAACTCG GATTCCCCTA 60  
GTAACGGCGA GTGAAGCGGG AAGAGCTCAT GTTGTAATC TCCAGCTTGC TGGCGAATTG 120  
TAGTCTAAAG GTGCGTGCTC AGTCGTGGTC CCGGGCTAAG TCTGTTGGAA AACAGCATCA 180  
TGGACGGTGA CAATCCGGTT CTGCTCGGG GTCCCGCGGC GTACGAGCCG TTTCCGACGA 240  
GTCGTGTTGC TTGGGATTGC AGCACTAAGT GGGTGGTAAA TTCCATCTAA AGCTAAATAT 300  
TGGTGGGAGA CCGATAGCGA ACAAGTACCG TGAGGGAAAAG ATGAAAAGAC TTTTGAAAAG 360  
AGAGTAAAT AGTACCTGAA ACTGCTGAAA GGAAGCGAT TGAAGTCAGT GTTGCTCCTG 420  
GTCTTTTTCG CGTCGCCCCC GTGGGGGTTG CCGCGTGGGG CCTGGAGCGT TTCAACATGC 480  
GTTCTGTTCC GCGGGAAATG TTCAGTGTGC TGGAACCTCG GGGAAAACGA CTGTTCTTGT 540  
CGTGGTTAGG ACGGAGGACC TTTGCTCCTT TGA CTGCGCG TTCTCTCTC GGGTATGCTG 600  
GTGTCTACTG CTTGCAGTTT TCATTTTCAT GCTTGCGACT GTGCGTGTTA TTCATGAGCG 660  
AACATGATGT TGAAGAAATG GCTTTAATTA CCCCCTCTTG AAACACGGAC CAAGG 715

<210> 28  
<211> 681  
<212> DNA  
<213> *Vacuolaria virescens*

<400> 28  
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CAAGTTGAAA ATCTGGGTGG GGCCTCCCCA TCCCGAATTG TAGTCTAGAG ACGCGTGCTC 120  
AGCCGTGCTC CAGGGCTAAG TCTGTTGGAA AACAGCATCA TGGACGGTGA TAATCCGGTT 180  
CTTGCCCTGG GTGTTGCGGT GTACGAGCCG TGATCCACGA GTCGAGTTGC TTGGGATTGC 240  
AGCTCTAAGC GGGTGGTAAA TTCCATCTAA AGCTAAATAT TGGTGGGAGA CCGATAGCAA 300  
ACAAGTACCG TGAGGAAAAG ATGAAAAGAA CTTTGAAAAG AGAGTTAAAA AGTACCTGAA 360  
ATTGCTGAAA GGAAGCGAA TGAAGTCAGT GTCTGCTCCT GGTGTGATTT TCGGAGTCCC 420

TGCGGGGATT CCGGCACTGT GGCCTGGAGC ATGTCAGGAT GAGTTCTCTG CCGTGGGATA 480  
 TGTTTGGTGG GATTGGTACC TTCGGGGAAA CCCGCCACTC TTGTCATGGC TTGGACTGAG 540  
 GTTCCATCTC GCCGTTTGCC TGCCCGTCGC TCTCTGCCGG TTGTTGCTGT CCTACTGCTT 600  
 GCAGTGCTCA GCTGCAGCTG ACTGACTGTG CGGGTCATGC ATGCGAGGTC AGGATCCTGA 660  
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<210> 29

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Artificial

PCR Primer

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<210> 30

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificial PCR Primer

<400> 30

CCTTGGTCCG TGTTTCAAGA

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